Louisiana Activities and Programs in Nutrient Control and Management?

Dugan S. Sabins and Jan R. Boydstun
Louisiana Department of Environmental Quality
Baton Rouge, Louisiana

Abstract

Louisiana has implemented many activities and programs to address the problems of nutrient enrichment. For many years, most activity was associated with point source control programs for municipal and industrial discharges, many of which had significant nutrient discharges. These point source control activities have led to substantial reductions in the nutrient loadings to state water bodies and are continuing. Recently, however, it has been recognized that diffused rainfall runoff from a variety of "nonpoint" sources are now contributing to the majority of man-induced nutrient loadings to Louisiana water bodies. To address the nonpoint sources of nutrients, Louisiana, as have most states, has initiated an aggressive nonpoint source program designed to work cooperatively with the Environmental Protection Agency under Section 319 of the Clean Water Act. Louisiana's Nonpoint Source Program has sought to support and incorporate existing local, state, and federal agency programs and enter into a broad cooperative "interagency" approach to the problem.

One of the first water bodies in the state that was targeted for nonpoint source implementation activities, which included nutrient controls, was Bayou Queue de Tortue in the Mermentau River Basin (Figure 111). Over a five year period, the program has seen the development of best management practices for rice cultivation that has benefited water quality. The state believes the Bayou Queue de Tortue experience shows that, working cooperatively, nutrient and water quality goals can be achieved (Figures 112 and 113). Other nonpoint source program activities addressing forestry practices and urban runoff, although not as far along in the development, are also showing promise in reaching water quality goals. The state is committed to pursuing whatever point and nonpoint source controls are necessary to address nutrient enrichment problems and believes its existing programs are achieving this goal.

No Manuscript Submitted.

Presentation Discussion

Dugan Sabins (Louisiana Department of Environmental Quality—Baton Rouge, LA)

There were no questions/discussion following Mr. Sabins' presentation.

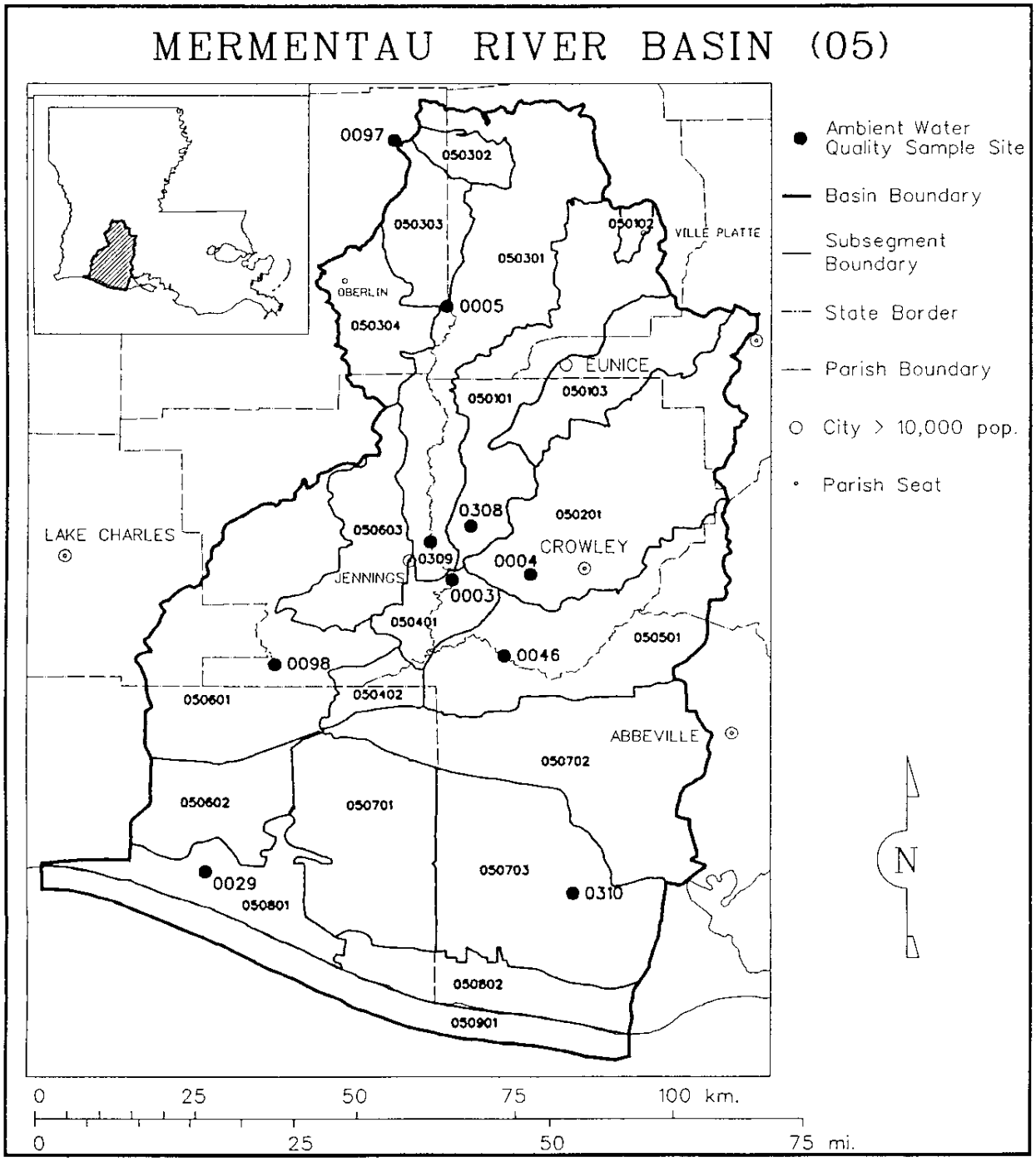
MERMENTAU RIVER BASIN (05)
Ambient Water Quality Sample Site
Basin Boundary
Subsegment Boundary
State Border
Parish Boundary
City > 10,000 pop.
Parish Seat
0097
050302
050303
050102
VILLE PLATTE
050301
OBERLIN
0005
050304
EUNICE
050101
050103
0308
050201
050603
LAKE CHARLES
0309
CROWLEY
0004
JENNINGS
0003
050401
050501
0098
0046
050601
050402
ABBEVILLE
050702
050602
050701
050703
0029
0310
050801
050802
050901
N
0 25 50 75 100 km.
0 25 50 75 mi.

Figure 111.

Bayou Queue de Tortue
Gueydan, Louisiana
58010046

Pre BMP : 1982 - 1989

Annual Average DO = 2.434 mg/L

Winter Average	***DO = 4.917 mg/L***
Spring Average	***DO = 2.083 mg/L***
Summer Average	***DO = 1.251 mg/L***
Fall Average	***DO = 1.483 mg/L***

Figure 112.

Bayou Queue de Tortue
Gueydan, Louisiana
58010046

Post BMP : 1990 - 1995

Annual Average DO = 3.512 mg/L

Winter Average	***DO = 5.639 mg/L***
Spring Average	***DO = 3.316 mg/L***
Summer Average	***DO = 2.144 mg/L***
Fall Average	***DO = 2.938 mg/L***

Figure 113.